

# Work Order ID 116453

\*116453\*

Page 1

Wednesday, April 16, 2014 10:26:04 AM

Item ID: D5046-7

Accept

\*N9000040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Co-Pilot Collective Head

Stop \*NS2\*

Start Date: 4/17/14 Start Qty: 2.00

\*2\* (3)

Cust Item ID:

Required Date: 4/25/14 Req'd Qty: 2.00

\*2\*

Customer:

Reference:

Approvals:

Process Plan: H

Date: 14-04-16

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D5046	A

100	Cut blanks as per folio	0.00							
*100*									
Bandsaw	Memo	0.00							
Jeaspa Bandsaw	CUT BLANK AT 5.500"								

110		0.00							
*110*									
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	MACHINE AS PER DWG & FOLIO FB296/ D5046-7								
	FOLIO REV: AA								
	DWG REV: A								

\*\*\*DO NOT BUFF OR POLISH PART\*\*\*

DEBURR

DQA:

Date:

14/05/02



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

14/04/30

Work Order update only ☐

Work Order: <u>116453</u>	<b>DISPOSITION</b> Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>			
Part No. <u>D5046-7</u>		Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
NCR No. <u>14-3775</u>		Machining <input checked="" type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>
		Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data	<input checked="" type="checkbox"/>								
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									
	14/04/21	110	1	<p>φ.665 +/- .002 groove is .678</p> <p>→ Part (groove) was programed with a φ.500 grooving tool but actual tool is φ.512"</p> <p>R.C Programing error</p>	<p>14/04/21</p> <p>03204</p>	<p>Scrap + Destroy</p> <p>Replac. 3 128866</p> <p>Program is fixed and updated</p> <p>\$21.57</p>	<p>14/04/21</p> <p>14/04/28</p>	<p>DAS 27 9-89</p> <p>14/04/28</p>	<p>032072</p> <p>14/04/21</p>

## FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input checked="" type="checkbox"/> Other	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled
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**Work Order ID 116453**

Wednesday, April 16, 2014 10:26:04 AM

**\*116453\***

Page 2

Item ID: D5046-7

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Co-Pilot Collective Head

Start Date: 4/17/14 Start Qty: 2.00 **\*2\***

Cust Item ID:

Required Date: 4/25/14 Req'd Qty: 2.00 **\*2\***

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

120

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*120\***

QC

Memo

0.00

Quality Control

D.A. 14/04/20

DAS  
08  
9-89

130

0.00

**\*130\***

Mill Conv

Memo

0.00

Conventional Milling Machine

DRILL REMAINING 2 HOLES AS PER DWG.

DWG REV: A

2

Ø

MH 14/04/20

140

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*140\***

QC

Memo

0.00

Quality Control

2

Ø

MH 14/04/20

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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**Work Order ID 116453**

Wednesday, April 16, 2014 10:26:04 AM

**\*116453\***

Page 3

Item ID: D5046-7

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Co-Pilot Collective Head

Start Date: 4/17/14 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 4/25/14 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150

QC8- Inspect parts - second check

0.00

**\*150\***

QC

Memo

0.00

Quality Control

2

Ø

DAS  
44  
9-89

14/04/26

160

Identify as per dwg & Stock Location: 51262A 0.00**\*160\***

Packaging

Memo

0.00

Packaging

2x

DAS  
28  
9-89

APR 28 2014

170

QC21- Final Inspection - Work Order Release 0.00

**\*170\***

QC

Memo

0.00

Quality Control

14/04/29

H 14-4-28

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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# Picklist Print

Wednesday, April 16, 2014 10:26:08 AM

Page 1

Work Order ID: 116453

\*116453\*

Parent Item: D5046-7

\*D5046-7\*

Parent Item Name: Co-Pilot Collective Head

Start Date: 4/17/14

Required Date: 4/25/14

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV. A NEW ISSUE JFS 14/04/14 VERIFIED BY: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B2.000X05.00 0		Purchased	No			100	f	24.0000	0.459	1			

\*M6061T6B2 000X05 000\*

\*\*

6061T6 Bar 2.00 x 5.000

Location

Loc Qty

Loc Code

MAT

24

m128573

12

→ m128866

12

1 *only 14/04/17*  
*m128866 + .4625<sup>ft</sup> (to replace scrap part)*

*b.a 14/04/21*

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

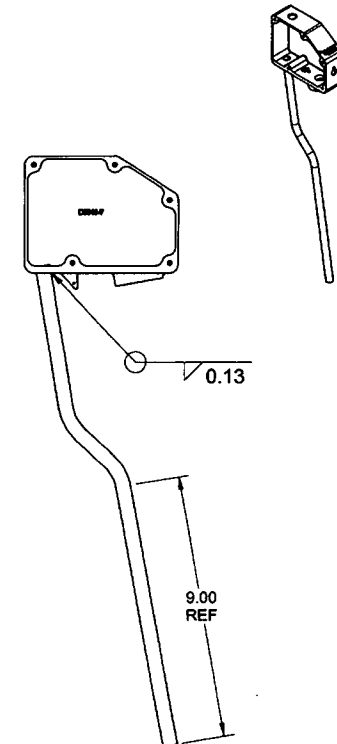
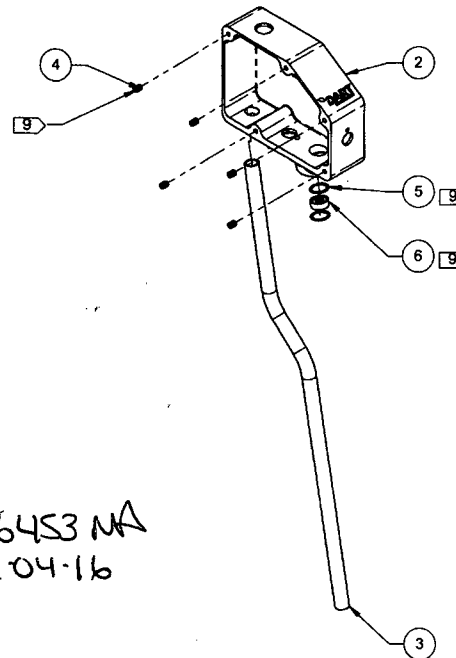
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other
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ITEM	QTY	P/N	DESCRIPTION
1	X	D5046-047	CO-PILOT COLLECTIVE HEAD ASSEMBLY
2	1	D5046-7	CO-PILOT COLLECTIVE HEAD
3	1	D5054-1	CONDUIT
4	5	90296A108	HELL-COIL INSERT (6-32 X 0.276)
5	2	D5073-1	SNAP RING
6	1	MS27641-3	BEARING



**D5046-047 WELDING DETAIL**

**D5046-047 CO-PILOT COLLECTIVE HEAD ASSEMBLY  
(FOR 205 WITH 204-001-290-5 STICK AND THROTTLE ASSEMBLY INSTALLED)**

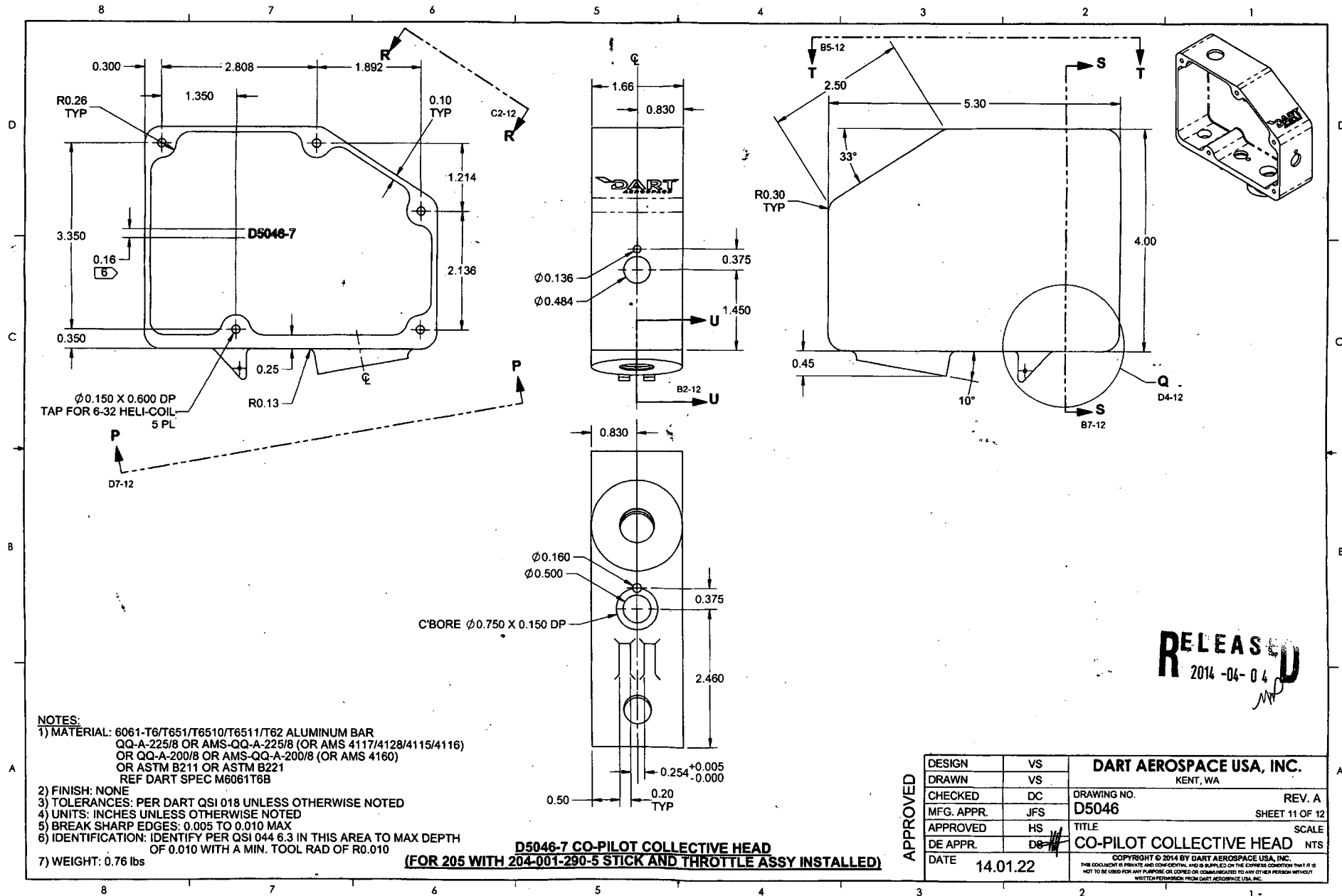
**NOTES:**

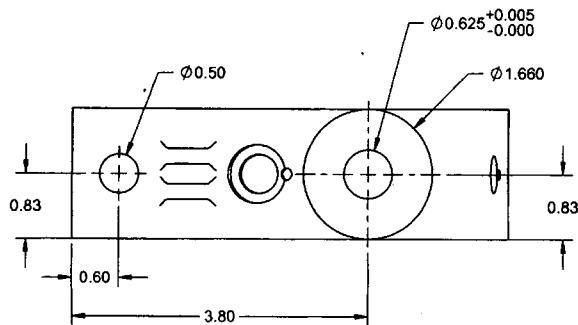
- 1) MATERIAL: N/A
- 2) FINISH: ANODIZE BLACK PER MIL-A-8625F TYPE I OR IB, OR IC OR II OR IIB CLASS 2 AFTER WELDING
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.89 lbs
- 8) WELD PER DART QSI 004
- 9) INSTALL AFTER ANODIZING

APPROVED

DESIGN	VS	<b>DART AEROSPACE USA, INC.</b> KENT, WA	
DRAWN	VS		
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	<b>D5046</b>	SHEET 4 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	D9	<b>CO-PILOT COLLECTIVE HEAD</b>	NTS
DATE	14.01.22	<small>COPYRIGHT © 2014 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESSED CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

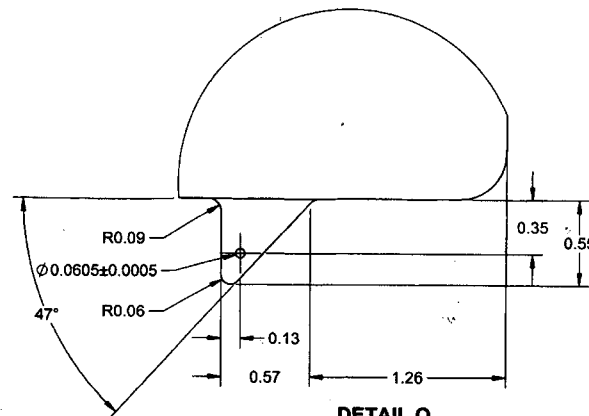
**RELEASED**  
2014-04-04





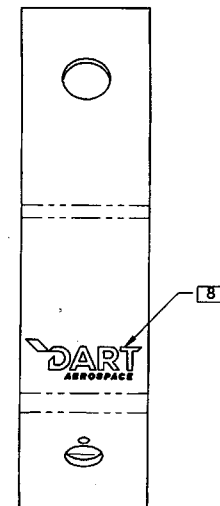
**VIEW P-P**

C7-11



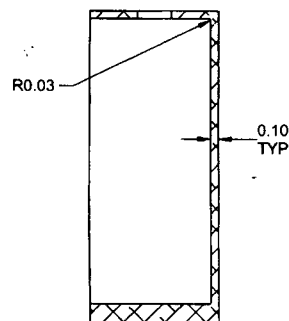
**DETAIL Q**

C2-11



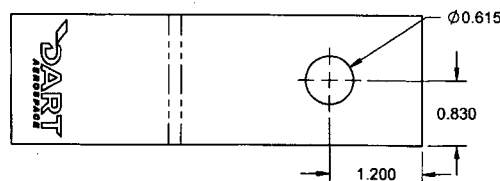
**VIEW R-R**

D6-11



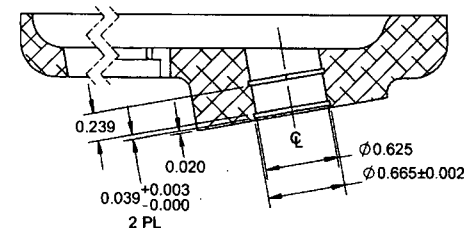
**SECTION S-S**

C2-11



**VIEW T-T**

D3-11



**SECTION U-U**

C5-11

**RELEASED**  
2014-04-08

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.76 lbs
- 8) ENGRAVE "DART" LOGO AS SHOWN 0.003-0.005 DP

**D5046-7 CO-PILOT COLLECTIVE HEAD**  
**(FOR 205 WITH 204-001-290-5 STICK AND THROTTLE ASSY INSTALLED)**

APPROVED

DESIGN	VS	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	VS	KENT, WA	
CHECKED	DC	DRAWING NO.	REV. A
MFG. APPR.	JFS	<b>D5046</b>	SHEET 12 OF 12
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	<b>CO-PILOT COLLECTIVE HEAD</b>	NTS
DATE	14.01.22	COPYRIGHT © 2014 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	116453
<b>Description:</b> Co-Pilot collective Head	<b>Part Number:</b>	D5046-7
<b>Inspection Dwg:</b> D5046 Rev: A		<b>Page 1 of 3</b>

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
$\phi 0.150 \times 0.600$	$+0.005 / -0.001$	$\phi 0.150 \times 0.602$	✓		Vern	GA-01
0.350	$\pm 0.010$	0.353	✓		"	"
3.350	$\pm 0.010$	3.351	✓		H-6	31006
0.300	$\pm 0.010$	0.301	✓		Vern	GA-01
2.808	$\pm 0.010$	2.807	✓		"	"
1.892	$\pm 0.010$	1.892	✓		H-6	31006
1.214	$\pm 0.010$	1.214	✓		"	"
2.136	$\pm 0.010$	2.136	✓		"	"
0.25	$\pm 0.030$	0.252	✓		Mic	GA-03
R0.13	$\pm 0.030$	R0.125	✓		R-6	ref.
1.66	$\pm 0.030$	1.658	✓		Mic	GA-02
0.830	$\pm 0.010$					
0.375	$\pm 0.010$					
$\phi 0.136$	$+0.005 / -0.001$					
$\phi 0.484$	$+0.006 / -0.001$					
1.450	$\pm 0.010$					
0.830	$\pm 0.010$	0.830	✓		Vern	GA-01
$\phi 0.160$	$+0.005 / -0.001$	$\phi 0.160$	✓		"	"
$\phi 0.500$	$+0.006 / -0.001$	$\phi 0.501$	✓		"	"
$\phi 0.750 \times 0.150$	$+0.006 / -0.001$	$\phi 0.751 \times 0.151$	✓		"	"
0.375	$\pm 0.010$	0.375	✓		H-6	31006
2.460	$\pm 0.010$	2.459	✓		Vern	GA-01

<b>Measured by:</b> B.A	<b>Audited by:</b> DAS 44 9-89	<b>Preliminary Approval:</b>
<b>Date:</b> 14/04/20	<b>Date:</b> 14/04/20	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	116 453
<b>Description:</b> C-0 Pilot Collective Head	<b>Part Number:</b>	D5046-7
<b>Inspection Dwg:</b> D5046 Rev: A		<b>Page 2 of 3</b>

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.254	+ .005 / - 0.000	φ 0.254	✓		Vern	GA-01
0.20	+ / - .030	0.199	✓		"	"
0.50	+ / - .030	0.501	✓		H-6	31006
0.45	+ / - .030	0.449	✓		"	"
5.30	+ / - .030	5.299	✓		Vern	GA-01
4.00	+ / - .030	3.997	✓		"	"
φ 1.660	+ / - .010	φ 1.656	✓		Mic	GA-02
φ 0.625	+ .005 / - .000	φ 0.628	✓		Vern	GA-01
φ 0.50	+ .006 / - .001	φ 0.502	✓		"	"
0.83	+ / - .030	0.830	✓		"	"
<del>0.60</del>	<del>+ / - .030</del>	<del>_____</del>	<del>_____</del>	<del>_____</del>	<del>_____</del>	<del>_____</del>
<del>3.80</del>	<del>+ / - .030</del>	<del>_____</del>	<del>_____</del>	<del>_____</del>	<del>_____</del>	<del>_____</del>
R0.03	+ / - .030	R0.010	✓		R-6	ref.
0.10	+ / - .030	0.097	✓		H-6	31006
1.200	+ / - .010	1.202	✓		Vern	GA-01
0.830	+ / - .010	0.831	✓		"	"
φ 0.615	+ .008 / - .001	φ 0.615	✓		"	"
R0.09	+ / - .030	R0.090	✓		R-6	ref.
φ 0.0605	+ / - .0005	φ 0.0600	✓		Vern / Gage <sup>PM</sup>	GA-01 / ref.
R0.06	+ / - .030	R0.063	✓		R-6	ref.
0.13	+ / - .030	0.127	✓		Vern	GA-01
0.35	+ / - .030	0.351	✓		H-6	31006

<b>Measured by:</b> B.A	<b>Audited by:</b> DAS 44 9-89	<b>Preliminary Approval:</b>
<b>Date:</b> 14/04/20	<b>Date:</b> 14/04/20	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15

